MODIS TECHNICAL TEAM MEETING

November 3, 1994

The MODIS Technical Team Meeting was chaired by Vince Salomonson. Present was Yoram Kaufman, Joann Harnden, Ed Masuoka, Wayne Esaias, Bill Barnes, Dick Weber, Rosemary Vail, John Bauernschub, and David Herring.

1.0 SCHEDULE OF EVENTS

Nov. 1	**Revisions of ATBDs receiving a grade of A or B due to EOS Project Science Office**
Nov. 1	**Beta code delivery due to SDST**
Nov. 29	SCAR B and C meeting at GSFC
Dec. 31	Revisions of ATBDs receiving a grade of C or D due to EOS Project Science Office
Jan. 15, 1995	Semi-annual reports due to Barbara Conboy
May 2, 1995	MODIS Calibration Working Group (tentative)
May 3 - 5, 1995	MODIS Science Team Meeting (tentative)

2.0 MINUTES OF THE MEETING

2.1 MODIS Program Science Reports

Barnes stated that at MODIS Project's request, he is beginning a study to see how many additional moon views may be obtained through the space viewport by rolling or pitching the EOS AM-1 spacecraft by a few degrees.

2.1.1 Turning on Day Mode at Night

Barnes said he has discussed with Kaufman options for obtaining data in the 1.65 µm and 2.1 µm bands at night. MODIS can only get data in those bands at night by turning on the day mode at night. Barnes said the issue then becomes whether MODIS can store the increase in data. Salomonson asked if the day mode can be turned on for short periods at predetermined locations. Barnes responded affirmatively. Esaias added that in order to obtain some day mode data on the night side, the Team may consider occasionally turning off MODIS over the poles since it will view these areas frequently.

2.2 SDST Reports

Masuoka reported on his meeting with Virginia Kalb, 920.2, Ted Meyer, EOSDIS Project, and Doug Ilg and Brad Fortner, HAIS (ECS contractor) on the Level 2 utility library. HAIS is reviewing the SDST utilities to see if they can be implemented using Hierarchical Data Format (HDF). Virginia Kalb, who wrote the SDST Utility Library, will investigate the possibility of converting the library routines to HDF with help from Doug Ilg over the next two weeks.

Masuoka announced that he has received five beta code deliveries. Roughly twenty-five more are due to be delivered over this month.

2.2.1 EOSDIS Allocation for MODIS

Masuoka reported that the new EOSDIS processing allocation for MODIS looks "tight" at best. The allocation presented by Steve Wharton at the IWG meeting for all of the EOS AM instruments was 5.3 GFLOPS and MODIS was projected to receive 54 percent of that, or 2.7 GFLOPS. Steve has learned that the EOS Project is using 3.2 GFLOPS as the total AM-1 and TRMM allocation. Of that, MODIS will receive roughly 1.5 GFLOPS, which is enough to make the Level 1A and 1B products.

Salomonson observed that this figure falls short of the Earth science community's expectations. He asked Weber to convey this notion to Chris Scolese, EOS AM Project Manager. Salomonson also pointed out that the current EOSDIS allocation does not allow for reprocessing. Kaufman stated that EOSDIS' objective is to distribute science algorithms, and with this allocation they will not be able to do so. He feels that if EOSDIS cannot process algorithms, then there is no need for EOSDIS.

Masuoka said EOSDIS is trying to address the issue of how much computing they can afford by the next Preliminary Design Review (PDR) in January 1995. He noted, however, that modeling of the EOSDIS system is taking place in the November to December time frame, so all of the issues may not be resolved prior to the PDR.

Masuoka later added that he and Al Fleig will represent MODIS on the GSFC DAAC Development Team which is chaired by Steve Ungar, GSFC DAAC Associate Project Scientist. This committee will provide the GSFC DAAC with feedback on its operation relative to the instrument data sets they represent. The first MODIS data sets will be MAS flight lines.

2.3 MODIS Project Reports

Weber announced that he will visit the Hughes El Segundo facility on Nov. 15. He told the team that the MODIS thermal vacuum chamber at SBRC is still on schedule. Also, SBRC now has a turnover table for rotating the engineering model (EM).

Weber reported that Guenther and Barnes went to Breault in Arizona to review the results of Breault's analyses on the MODIS light scattering problem. Barnes said that Breault is convinced that the scattering problem is not as bad as was previously thought. Specific, conclusive test results are still forthcoming.

2.3.1 CERES Mirrors Experiencing Problems

Weber stated that the CERES Team has noticed that their mirrors are pitting or otherwise degrading. This raises concerns in that CERES used the same company to design and treat its mirrors that developed the MODIS scan mirror. However, SBRC has not detected any degradation or pitting on the MODIS mirror. According to Weber, Denton Vacuum Inc., claims that CERES mirror problems are due to the relatively foul Los Angeles atmosphere.

2.3.2 MODIS Replan Proposal

Weber has received the replan proposal from SBRC detailing their latest cost projections through the development of the second protoflight model. He noted that the replan assumes that the move will not affect the development schedule.

2.4 Ocean Group Reports

Esaias told the Team that Dennis Clark was in an accident Tuesday—he received severe lacerations to his fingers when he got his hand caught in a winch while conducting shipboard operations off the coast of Hawaii. A helicopter was promptly called in to fly Clark ashore to receive medical attention. Reports indicate that Clark did not lose any fingers, and that he has returned to the ship to resume operations.

Esaias announced that his ATBD revision will be completed and submitted soon.

2.4.1 Primary Productivity Round Robin

Esaias stated that he will soon send out a letter inviting about 100 people to participate in the upcoming primary productivity round robin. Participants will receive the same in-situ data from about 30 stations and will run their respective algorithms on the data in order to compare results.

The beta delivery primary productivity documentation is currently being typed and will be submitted by the end of the week.

2.5 MAST Reports

Herring reported that completion of the Science Team Meeting Minutes has been delayed slightly due to other more urgent demands on his time. However, he expects to complete them by Nov. 4.

Salomonson inquired as to the status of the MODIS Brochure. Herring responded that Winnie Humberson, EOS Project Science Office, is in the process of obtaining printing approval. Once approved, the brochure will be sent to Salomonson and Michael King, EOS Senior Project Scientist, for a final review.

3.0 ACTION ITEMS

3.1 Action Items Carried Forward

1. *MODIS Team*: Determine how, given the MODIS bowtie effect, MODIS images will be produced at launch.

2. *Fleig and Ungar*: Interact with the group leaders prior to developing a MODIS data simulation plan for review at the next Science Team Meeting. [Work on this item is in progress.]